

replaced by art 24

Claims

1. A process for stabilizing the pH of a pulp suspension, characterized in that the alkalinity of a paper making pulp suspension is increased by adding thereto a combination of an alkali metal hydroxide feed and a carbon dioxide feed which feeds substantially counter each other's pH changing effect, said feeds being provided in an amount sufficient to achieve a significant buffering effect of said pulp suspension for paper making.
2. Process according to claim 1, characterized in that the pH of said pulp suspension is adjusted by adding an alkaline agent such as an excess of said alkali metal hydroxide or by adding an acidic agent such as an excess of said carbon dioxide.
3. Process according to claim 1, characterized in that said alkali metal hydroxide is aqueous sodium hydroxide and said carbon dioxide is gaseous carbon dioxide.
4. Process according to claim 1, characterized in that said alkali metal hydroxide is fed to said pulp suspension prior to the feeding of said carbon dioxide.
5. Process according to claim 1, characterized in that said pulp suspension is buffered by said combination to a pH between about 7 and 9.
6. Process according to claim 5, characterized in that the alkalinity of said pulp suspension is increased by providing a substantially equal molar amount of alkali metal hydroxide and dissolved carbon dioxide, said amount being sufficient to provide a significant buffering effect at about pH 8.
7. Process according to claim 1, characterized in that the pH of said pulp suspension is adjusted to a value lower than pH 8 by adding an excess of carbon dioxide.
8. Process according to claim 1, characterized in that the pH of said pulp suspension is adjusted to a value higher than pH 8 by adding an excess of alkali metal hydroxide.
9. Process according to claim 1, characterized in that said pulp suspension is chemical or mechanical pulp.
10. Process according to claim 9, characterized in that said pulp suspension is

bleached chemical pulp.

11. Process according to claim 1, characterized in that said pulp suspension contains and/or is intended to contain calcium carbonate filler.

12. Process according to claim 1, characterized in that said alkali metal hydroxide and carbon dioxide feeds are added to said pulp suspension flowing in a pipe leading to a stock preparation tank.

13. A process for producing paper comprising

- providing a paper making pulp suspension;
- increasing the alkalinity of said pulp suspension by adding thereto a combination of an alkali metal hydroxide feed and a carbon dioxide feed which feeds substantially counter each others pH changing effect, said feeds being provided in an amount sufficient to achieve a substantial buffering effect of said pulp suspension for paper making;
- optionally adjusting the pH of said pulp suspension to a desired value between 7 and 9 by adding an alkaline agent or an acidic agent;
- forming said pulp suspension into a web; and
- drying said web to form paper.